WORKPAPER 3.0 PAGE 2 OF 3

## PHYSICAL COLLOCATION Verizon - Maryland FCC - 1

	Ā	<u>B</u>	<u>c</u>	D	<u>E</u>	Ē
	<u>ITEM</u>	SOURCE	LAND	BLDG	SWITCH EQPT.	TOTAL INVEST
1	TOTAL POWER PLANT UNIT INVESTMENT	WP 3.1, PG 3, LINE 10	-	-	\$248.71	\$248.71
2	EF&I FACTOR - FRC 377C	WP 8.0, PG 1, LINE 24E	-	-	2.7852	2.7852
3	INSTALLED INVESTMENT (NRC)	LINE 1 x LINE 2	-	-	\$692.71	\$692.71
4	UTILIZATION FACTOR	ENGINEERING	-	-	1.0000	1.0000
5	TOTAL IN-PLACE INVESTMENT	LINE 3 x LINE 4	•	-	\$692.71	\$692.71
6	LAND INVESTMENT FACTOR	WP 8.0, PG 1, LINE 22E	0.0078	-	-	0.0078
7	BUILDING INVESTMENT FACTOR	WP 8.0, PG 1, LINE 23E	-	0.1470	-	0.1470
8	LAND INVESTMENT	LINE 5E x LINE 6C	\$5.40		-	\$5.40
9	BUILDING INVESTMENT	LINE 5E x LINE 7D	-	\$101.82	-	\$101.82
10	TOTAL UNIT INVESTMENT	LINE 5E + LINE 8C + LINE 9D	\$5.40	\$101.82	\$692.71	\$799.93
11	WEIGHTED UNIT INVESTMENT	INE 10 x WP 8.0, PG 1, LINE 26E	\$0.88	\$16.54	\$112.53	\$129.95

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## PHYSICAL COLLOCATION Verizon - Maryland FCC - 1

	<u>.</u>	₿	<u>c</u>	₫	<u>E</u>	<u>F</u>
	ITEM	SOURCE	LAND	BLDG	CKT EQPT.	TOTAL INVEST
1	TOTAL UNIT INVESTMENT	WP 3.0, PG 2 LINE 10	\$5.40	\$101.82	\$692.71	\$799.93
2	DEPRECIATION	LINE 1 X WP 8.0 - ACF FACTOR	\$0.00	\$2.24	\$27.79	\$30.04
3	COST OF MONEY	LINE 1 X WP 8.0 - ACF FACTOR	\$0.61	\$8.49	\$38.50	\$47.60
4	INCOME TAX	LINE 1 X WP 8.0 - ACF FACTOR	\$0.30	\$4.17	\$18.92	\$23.39
5	MAINTENANCE	LINE 1 X WP 8.0 - ACF FACTOR	\$0.14	\$2.62	\$34.70	\$37.45
6	ADMINISTRATION	LINE 1 X WP 8.0 - ACF FACTOR	\$0.23	\$4.37	\$29.71	\$34.31
7	OTHER TAX	LINE 1 X WP 8.0 - ACF FACTOR	<u>\$0.09</u>	<u>\$1.78</u>	<u>\$12.16</u>	<u>\$14.03</u>
8	ANNUAL DIRECT COST	SUM (LINE 2 THRU LINE 7)	\$1.37	\$23.67	\$161.78	\$186.83
9	WEIGHTED UNIT INVESTMENT	LINE 8 x WP 8.0, PG 1, LINE 26E	\$0.22	\$3.85	\$26.28	\$30.35

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# PHYSICAL COLLOCATION Verizon - Maryland FCC NO. 1

				_	_	_
	<u> </u>	<u>B</u>	Ē	Ď	Ē	Ē
LINE NO.	<u>ITEM</u>	SOURCE	METRO	URBAN	SUBURBAN	RURAL
	Microprocessor Plant (BUSS BAR)					
1	AMP	Engineering	5.000	2,600	2,600	600
2	Material	Engineering	\$27,154	\$23,879	\$23,879	\$18,349
3	Unit Investment Per AMP	(L2 / L1)	\$5.43	\$9.18	\$9.18	\$30.58
4	Statewide Weighting	WP 8.0, Col E, Lns 27-30	0.1763	0.5162	0 1698	0.1377
5	Statewide Unit Investment Per AMP	\$11.47	\$0.96	\$4.74	\$1.56	\$4.21
	Postifiere					
6	Rectifiers Quantity	Engineering	6	6	6	7
7	AMPS per unit	Engineering	400	200	200	50
8	Tot. AMPS	( L6 * L7)	2,400	1,200	1,200	350
9	Utilization	(L6-1) / L6)	83.33%	83.33%	83.33%	85.71%
10	Material	Engineering	\$55,502	\$42,046	\$42,046	\$15,900
11	Total Investment	(L10 / L9)	\$66,602	\$50,455	\$50,455	\$18,550
12	Unit Investment Per AMP	(L11 / L8)	\$27.75	\$42.05	\$42.05	\$53.00
13	Statewide Weighting	WP 8.0, Col E, Lns 27-30	0.1763	<u>0.5162</u>	0.1698	0.1377
14	Statewide Unit Investment Per AMP	\$41.03	\$4.89	\$21.70	\$7.14	\$7.30
	Batteries					
15	Strings	Engineering	3	3	3	2
16	AMPs per String	Engineering	688	310	310	310
17	Tot. AMPS	(L15 * L16)	2,064	930	930	620
18	Total Investment	Engineering	\$80,952	<b>\$3</b> 4,965	\$34,965	\$23,310
19 20	Unit Investment Per AMP Statewide Weighting	(L18 / L17) WP 8.0, Col E, Lns 27-30	\$39.22 0.1763	\$37.60 0.5162	\$37.60 0.1698	\$37.60 0.1377
			0.1763	0.5162		
21	Statewide Unit Investment Per AMP	\$37.88	\$6.91	\$19.41	\$6.38	\$5.18
	Automatic Breaker					
22	Automatic Breaker  AMP per Breaker	Engineering	1,600	1,200	800	400
23	Total Investment	Engineering	\$50,000	\$40,000	\$35,000	\$20,000
24	Unit Investment Per AMP	(L23 / L22)	\$31.25	\$33,33	\$43.75	\$50.00
25	Statewide Weighting	WP 8.0, Col E, Lns 27-30	0.1763	0.5162	0.1698	0.1377
26	Statewide Unit Investment Per AMP	\$37.03	\$5.51	\$17.21	\$7.43	\$6.89
	Bower Distribution Contine Cohinet					
27	Power Distribution Service Cabinet Amps	Engineering	1,600	800	400	400
28	Material	Engineering	\$13,976	\$7,788	<b>\$</b> 5,677	\$3,467
29	Unit Investment Per AMP	(L28 / L27)	\$8.74	\$9.74	\$14.19	\$8.67
30	Statewide Weighting	WP 8.0, Col E, Lns 27-30	0.1763	0.5162	0.1698	0.1377
31	Statewide Unit Investment Per AMP	\$10.17	\$1.54	\$5.03	\$2.41	\$1.19
	Emergency engine/turbine (auto start)	<u>.</u>				
32 33	AMP Capacity Utilization	Engineering	2,605	1,736 70%	1,111 70%	434
33 34	Utilized AMPS	Engineering (L32 * L33)	70% 1,824	1,215	70% 778	70% 304
35	Emerg. Engine Invest.	Engineering	\$130,765	\$78,249	\$53,871	\$41,874
36	Conduit/Emer Lights	Engineering	\$45,629	\$30,487	\$23,332	\$11,810
37	Total Investment	(L35 + L36)	\$176,394	\$108,736	\$77,203	\$53,684
38	Unit Investment Per AMP	(L37 / L34)	\$96.73	\$89.48	\$99.27	\$176.71
39	Statewide Weighting	WP 8.0, Col E, Lns 27-30	0.1763	0.5162	0.1698	0.1377
40	Statewide Unit Investment Per AMP	\$104.43	\$17.05	\$46.19	\$16.86	\$24.33
	Ratteny Distribution Fuse Pay					
44	Battery Distribution Fuse Bay	Camina antesa	000	900	000	000
41 42	AMP Capacity	Engineering	800 \$5.355	800 \$5.355	800 \$5.355	800 \$5.355
42	Material Unit Investment Per AMP	Engineering (L42 / L41)	\$5,355 \$6,69	\$5,355 \$6.69	\$5,355 \$6.69	\$5,355 \$6.69
43 44	Statewide Weighting	(L427 L41) WP 8.0, Col E, Lns 27-30	\$6.69 0.1763	0.5162	96.69 0.1698	\$6.69 0.1377
45	Statewide Unit Investment Per AMP	\$6.69	\$1.18	\$3.46	\$1.14	\$0.92
	Total Unit Investment - (Less than or					
46	Equal to 60 AMP's) - Sum Lines	\$248.71				
	(5C+14C+21C+26C+31C+40C+45C)					

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## PHYSICAL COLLOCATION Verizon - Maryland FCC - 1

	<u>A</u>	<u>B</u>	<u>c</u>	<u>D</u>	<u> </u>	<u>E</u>
	<u>ITEM</u>	SOURCE	LAND	BLDG	SWITCH EQPT.	TOTAL INVEST
1	TOTAL POWER PLANT UNIT INVESTMENT	WP 3.0, PG 3, LINE 10	-	-	\$251.11	\$251.11
2	EF&I FACTOR - FRC 377C	WP 8.0, PG 1, LINE 24E	-	-	2.7852	2.7852
3	INSTALLED INVESTMENT (NRC)	LINE 1 x LINE 2	-	-	\$699.40	\$699.40
4	UTILIZATION FACTOR	ENGINEERING	-	-	1.0000	1.0000
5	TOTAL IN-PLACE INVESTMENT	LINE 3 x LINE 4	-	-	\$699.40	\$699.40
6	LAND INVESTMENT FACTOR	WP 8.0, PG 1, LINE 22E	0.0078	-	-	0.0078
7	BUILDING INVESTMENT FACTOR	WP 8.0, PG 1, LINE 23E	-	0.1470	-	0.1470
8	LAND INVESTMENT	LINE 5E x LINE 6C	\$5.45		-	\$5.45
9	BUILDING INVESTMENT	LINE 5E x LINE 7D	-	\$102.80	-	\$102.80
10	TOTAL UNIT INVESTMENT	LINE 5E + LINE 8C + LINE 9D	\$5.45	\$102.80	\$699.40	\$807.65
11	WEIGHTED UNIT INVESTMENT	INE 10 x WP 8.0, PG 1, LINE 26E	\$0.89	\$16.70	\$113.62	\$131.20

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## PHYSICAL COLLOCATION Verizon - Maryland FCC - 1

	A	<u>B</u>	<u>c</u>	D	E	<u>F</u>
	ITEM	SOURCE	LAND	BLDG	CKT EQPT.	TOTAL INVEST
1	TOTAL UNIT INVESTMENT	WP 3.0, PG 2 LINE 10	\$5.45	\$102.80	\$699.40	\$807.65
2	DEPRECIATION	LINE 1 X WP 8.0 - ACF FACTOR	\$0.00	\$2.26	\$28.06	\$30.32
3	COST OF MONEY	LINE 1 X WP 8.0 - ACF FACTOR	\$0.62	\$8.57	\$38.87	\$48.06
4	INCOME TAX	LINE 1 X WP 8.0 - ACF FACTOR	\$0.30	\$4.21	\$19.10	\$23.62
5	MAINTENANCE	LINE 1 X WP 8.0 - ACF FACTOR	\$0.14	\$2.64	\$35.03	\$37.82
6	ADMINISTRATION	LINE 1 X WP 8.0 - ACF FACTOR	\$0.23	\$4.41	\$30.00	\$34.64
7	OTHER TAX	LINE 1 X WP 8.0 - ACF FACTOR	<u>\$0.10</u>	<u>\$1.80</u>	<u>\$12.27</u>	<u>\$14.17</u>
8	ANNUAL DIRECT COST	SUM (LINE 2 THRU LINE 7)	\$1.39	\$23.90	\$163.34	\$188.63
9	WEIGHTED UNIT INVESTMENT	LINE 8 x WP 8.0, PG 1, LINE 26E	\$0.23	\$3.88	\$26.53	\$30.64

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# PHYSICAL COLLOCATION Verizon - Maryland FCC NO. 1

#### DC POWER - GREATER THAN 60 AMPS

	•			D	-	
	<u>A</u>	₽	<u>C</u>		<b>E</b>	E
LINE NO.	ITEM	SOURCE	METRO	URBAN	SUBURBAN	RURAL
	Microprocessor Plant (BUSS BAR)					
1	AMP	Engineering	5,000	2,600	2,600	600
2	Material	Engineering	\$27,154	\$23,879	\$23,879	\$18,349
3 4	Unit Investment Per AMP Statewide Weighting	(L2 / L1) WP 8.0, Col E, Lns 27-30	\$5.43 0.1763	\$9.18 0.5162	\$9.18 0.1698	\$30.58 0.1377
5	Statewide Unit Investment Per AMP	\$11.47	\$0.96	\$4.74	\$1.56	\$4.21
	<u>Rectifiers</u>					
6	Quantity	Engineering	6	6	6	7
7	AMPS per unit	Engineering	400	200	200	50
8 9	Tot. AMPS Utilization	( L6 * L7) (L6-1) / L6)	2,400 83.33%	1,200 83.33%	1,200 83.33%	350 85.71%
10	Material	Engineering	\$55,502	\$42,046	\$42,046	\$15,900
11	Total Investment	(L10 / L9)	\$66,602	\$50,455	\$50,455	\$18,550
12	Unit Investment Per AMP	(L11 / L8)	\$27.75	\$42.05	\$42.05	\$53.00
13	Statewide Weighting	WP 8.0, Col E, Lns 27-30	0.1763	0 5162	0.1698	0.1377
14	Statewide Unit Investment Per AMP	\$41.03	\$4.89	\$21.70	\$7.14	\$7.30
	Batteries					
15	Strings	Engineering	3	3	3	2
16	AMPs per String	Engineering	688	310	310	310
17	Tot. AMPS	(L15 * L16)	2,064	930	930	620
18	Total investment	Engineering	\$80,952	\$34,965	<b>\$</b> 34, <b>96</b> 5	\$23,310
19	Unit Investment Per AMP	(L18 / L17)	\$39.22	\$37.60	\$37.60	\$37.60
20	Statewide Weighting	WP 8.0, Col E, Lns 27-30	0.1763	0.5162	0.1698	0.1377
21	Statewide Unit Investment Per AMP	\$37.88	\$6.91	\$19.41	\$6.38	\$5.18
	Automatic Breaker					
22	AMP per Breaker	Engineering	1,600	1,200	800	400
23	Total Investment	Engineering	\$50,000	\$40,000	\$35,000	\$20,000
24	Unit Investment Per AMP	(L23 / L22)	\$31.25	\$33.33	\$43.75	\$50.00
25	Statewide Weighting	WP 8.0, Col E, Lns 27-30	0.1763	0.5162	0.1698	0.1377
26	Statewide Unit Investment Per AMP	\$37.03	\$5.51	\$17.21	\$7.43	\$6.89
	Power Distribution Service Cabinet					
27	Amps	Engineering	1,600	800	400	400
28	Material	Engineering	\$13,976	\$7,788	\$5,677	\$3,467
29	Unit Investment Per AMP	(L28 / L27)	\$8.74	\$9.74	\$14.19	\$8.67
30	Statewide Weighting	WP 8.0, Col E, Lns 27-30	0.1763	0.5162	0.1698	0.1377
31	Statewide Unit Investment Per AMP	\$10.17	\$1.54	\$5.03	\$2.41	\$1.19
	<b>5</b>					
22	Emergency engine/turbine (auto start)  AMP Capacity	Casina and a	2.005	1 726		42.4
32 33	Utilization	Engineering Engineering	2,605 70%	1,736 70%	1,111 70%	434 70%
34	Utilized AMPS	(L32 * L33)	1,824	1,215	778	304
35	Emerg. Engine Invest.	Engineering	\$130,765	\$78,249	\$53,871	\$41,874
36	Conduit/Emer Lights	Engineering	\$45,629	\$30.487	\$23,332	\$11,810
37	Total Investment	(L35 + L36)	\$176,394	\$108,736	\$77,203	\$53,684
38	Unit Investment Per AMP	(L37 / L34)	\$96.73	\$89.48	\$99.27	\$176.71
39	Statewide Weighting	WP 8.0, Col E, Lns 27-30	0.1763	0.5162	0.1698	0.1377
40	Statewide Unit Investment Per AMP	\$104.43	<b>\$</b> 17.05	\$46.19	\$16.86	\$24.33
	Power Plant Distribution Bay					
41	AMP Capacity	Engineering	2,600	1,200	1,200	300
42	Material	Engineering	\$12,747	\$10.388	\$10,388	\$4,993
43	Unit Investment Per AMP	(L42 / L41)	\$4.90	\$8.66	\$8.66	\$16.64
44	Statewide Weighting	WP 8.0, Col E, Lns 27-30	0.1763	0.5162	0.1698	0.1377
45	Statewide Unit Investment Per AMP	\$9.09	\$0.86	\$4.47	\$1.47	\$2.29

Total Unit Investment - (Greater than 60

<u>AMPs) -Sum Lines</u> (5C+14C+21C+26C+31C+40C + 45C) \$251.11

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## PHYSICAL COLLOCATION Verizon - New Jersey FCC - 1

	<u>A</u>	<u>B</u>	<u>c</u>	<u>D</u>	E	<u>F</u>
	<u>ITEM</u>	SOURCE	LAND	BLDG	SWITCH EQPT.	TOTAL INVEST
1	TOTAL POWER PLANT UNIT INVESTMENT	WP 4.0, PG 3, LINE 10	-	-	\$232.28	\$232.28
2	EF&I FACTOR - FRC 377C	WP 8.0, PG 1, LINE 24F	-	-	2.7852	2.7852
3	INSTALLED INVESTMENT (NRC)	LINE 1 x LINE 2	-	-	\$646.96	\$646.96
4	UTILIZATION FACTOR	ENGINEERING	-	-	1.0000	1.0000
5	TOTAL IN-PLACE INVESTMENT	LINE 3 x LINE 4	-	-	\$646.96	\$646.96
6	LAND INVESTMENT FACTOR	WP 8.0, PG 1, LINE 22F	0.0106	-	-	0.0106
7	BUILDING INVESTMENT FACTOR	WP 8.0, PG 1, LINE 23F	-	0.1687	-	0.1687
8	LAND INVESTMENT	LINE 5E x LINE 6C	\$6.85		-	\$6.85
9	BUILDING INVESTMENT	LINE 5E x LINE 7D	-	\$109.16	-	\$109.16
10	TOTAL UNIT INVESTMENT	LINE 5E + LINE 8C + LINE 9D	\$6.85	\$109.16	\$646.96	\$762.97
11	WEIGHTED UNIT INVESTMENT	INE 10 x WP 8.0, PG 1, LINE 26F	\$2.00	\$31.87	\$188.89	\$222.76

WORKPAPER 4.0 PAGE 1 OF 3

## PHYSICAL COLLOCATION Verizon - New Jersey FCC - 1

	A	<u>B</u>	<u>C</u>	D	<u>E</u>	<u>F</u>
	<u>ITEM</u>	SOURCE	LAND	BLDG	CKT EQPT.	TOTAL INVEST
1	TOTAL UNIT INVESTMENT	WP 4.0, PG 2 LINE 10	\$6.85	\$109.16	\$646.96	\$762.97
2	DEPRECIATION	LINE 1 X WP 8.0 - ACF FACTOR	\$0.00	\$2.37	\$25.76	\$28.13
3	COST OF MONEY	LINE 1 X WP 8.0 - ACF FACTOR	\$0.77	\$9.09	\$35.68	\$45.55
4	INCOME TAX	LINE 1 X WP 8.0 - ACF FACTOR	\$0.40	\$4.72	\$18.51	\$23.62
5	MAINTENANCE	LINE 1 X WP 8.0 - ACF FACTOR	\$0.18	\$2.82	\$38.87	\$41.86
6	ADMINISTRATION	LINE 1 X WP 8.0 - ACF FACTOR	\$0.30	\$4.72	\$27.93	\$32.94
7	OTHER TAX	LINE 1 X WP 8.0 - ACF FACTOR	\$0.08	<u>\$1.35</u>	<u>\$8.02</u>	<u>\$9.46</u>
8	ANNUAL DIRECT COST	SUM (LINE 2 THRU LINE 7)	\$1.73	\$25.06	\$154.76	\$181.56
9	WEIGHTED UNIT INVESTMENT	LINE 8 x WP 8.0, PG 1, LINE 26F	\$0.51	\$7.32	<b>\$4</b> 5.18	\$53.01

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#### PHYSICAL COLLOCATION Verizon - New Jersey FCC NO. 1

	<u>A</u>	B	c	₽	E	Ē
LINE NO.	ITEM	SOURCE	METRO	URBAN	SUBURBAN	RURAL
	Microprocessor Plant (BUSS BAR)					
1	AMP	Engineering	5,000	2,600	2,600	600
2	Material	Engineering	\$27,154	\$23,879	\$23,879	\$18,349
3 4	Unit Investment Per AMP Statewide Weighting	(L2 / L1) WP 8.0, Col F, Lns 27-30	\$5.43 0.3097	\$9.18 0.4901	\$9.18 0.1724	\$30.58 0.0278
5	Statewide Unit Investment Per AMP	\$8.62	\$1.68	\$4.50	\$1.58	\$0.85
				•	••	
_	Rectifiers		_	_	_	_
6	Quantity	Engineering	6	6	6	7
7 8	AMPS per unit Tot, AMPS	Engineering ( L6 * L7)	400 2,400	200 1,200	200 1,200	50 350
9	Utilization	(L6-1) / L6)	83.33%	83.33%	83.33%	85.71%
10	Material	Engineering	\$55,502	\$42.046	\$42,046	\$15,900
11	Total Investment	(L10 / L9)	\$66,602	\$50,455	\$50,455	\$18,550
12	Unit Investment Per AMP	(L11 / L8)	\$27.75	\$42.05	\$42.05	\$53.00
13	Statewide Weighting	WP 8.0, Col F, Lns 27-30	0.3097	0.4901	0.1724	0.0278
14	Statewide Unit Investment Per AMP	\$37.92	\$8.59	\$20.61	\$7.25	\$1.47
	<u>Batteries</u>	_				
15	Strings	Engineering	3	3	3	2
16 17	AMPs per String Tot, AMPS	Engineering	688 2,064	310 930	310 930	310 620
18	Total Investment	(L15 * L16) Engineering	\$80,952	\$34,965	\$34.965	\$23,310
19	Unit Investment Per AMP	(L18 / L17)	\$39.22	\$37.60	\$37.60	\$37.60
20	Statewide Weighting	WP 8.0, Col F, Lns 27-30	0.3097	0.4901	0.1724	0 0278
21	Statewide Unit Investment Per AMP	\$38.10	\$12.15	\$18.43	\$6.48	\$1.05
	Automatic Breaker					
22	AMP per Breaker	Engineering	1,600	1,200	800	400
23	Total Investment	Engineering	\$50,000	\$40,000	\$35,000	\$20,000
24	Unit Investment Per AMP	(L23 / L22)	\$31.25	\$33.33	\$43.75	\$50.00
25	Statewide Weighting	WP 8.0, Col F, Lns 27-30	0.3097	0.4901	0.1724	0 0278
26	Statewide Unit Investment Per AMP	\$34.95	\$9.68	\$16.34	\$7.54	\$1.39
	Power Distribution Service Cabinet					
27	Amps	Engineering	1,600	800	400	400
28	Material	Engineering	<b>\$1</b> 3,976	\$7,788	\$5,677	\$3,467
29	Unit Investment Per AMP	(L28 / L27)	\$8.74	\$9.74	\$14.19	\$8.67
30	Statewide Weighting	WP 8.0, Col F, Lns 27-30	0.3097	0.4901	0.1724	0.0278
31	Statewide Unit Investment Per AMP	\$10.16	\$2.71	\$4.77	\$2.45	\$0.24
	Emergency engine/turbine (auto start)					
32	AMP Capacity	Engineering	2,605	1,736	1,111	434
33 34	Utilization	Engineering	70%	70%	70%	70%
35	Utilized AMPS Emerg. Engine Invest.	(L32 * L33) Engineering	1,824 \$130,765	1,215 \$78,249	778 \$53,871	304 \$41,874
36	Conduit/Erner Lights	Engineering	\$45,629	\$30,487	\$23,332	\$11,810
37	Total Investment	(L35 + L36)	\$176,394	\$108,736	\$77,203	<b>\$</b> 53,684
38	Unit Investment Per AMP	(L37 / L34)	\$96.73	\$89.48	\$99.27	\$176.71
39	Statewide Weighting	WP 8.0, Col F, Lns 27-30	0.3097	0.4901	0.1724	0.027B
40	Statewide Unit Investment Per AMP	\$95.84	\$29.96	\$43.85	\$17.11	\$4.91
	Battery Distribution Fuse Bay					
41	AMP Capacity	Engineering	800	800	800	800
42	Material	Engineering	\$5,355	\$5,355	\$5,355	\$5,355
43 44	Unit Investment Per AMP	(L42 / L41)	\$6.69 0.3097	\$6.69	\$6.69 0.1724	\$6.69 0.0378
44 45	Statewide Weighting Statewide Unit Investment Per AMP	WP 8.0, Col F, Lns 27-30	0.3097	0.4901	<u>0.1724</u>	0.0278
70	Orgrening Other minestrugger Let WINL	\$6.69	\$2.07	\$3.28	\$1.15	\$0.19
	Total Unit Investment - (Less than or					
46	Equal to 60 AMP's) - Sum Lines	\$232.28				
	(5C+14C+21C+26C+31C+40C+45C)					

WORKPAPER 4.1 PAGE 2 OF 3

## PHYSICAL COLLOCATION Verizon - New Jersey FCC - 1

	Ā	<u>B</u>	<u>c</u>	<u>D</u>	Ē	<u>E</u>
	<u>ITEM</u>	SOURCE	LAND	BLDG	SWITCH EQPT.	TOTAL INVEST
1	TOTAL POWER PLANT UNIT INVESTMENT	WP 4.0, PG 3, LINE 10	-	-	\$233.31	\$233.31
2	EF&I FACTOR - FRC 377C	WP 8.0, PG 1, LINE 24F	-	-	2.7852	2.7852
3	INSTALLED INVESTMENT (NRC)	LINE 1 x LINE 2	-	-	\$649.81	\$649.81
4	UTILIZATION FACTOR	ENGINEERING	-	-	1.0000	1.0000
5	TOTAL IN-PLACE INVESTMENT	LINE 3 x LINE 4	-	-	\$649.81	\$649.81
6	LAND INVESTMENT FACTOR	WP 8.0, PG 1, LINE 22F	0.0106	-	-	0.0106
7	BUILDING INVESTMENT FACTOR	WP 8.0, PG 1, LINE 23F	-	0.1687	-	0.1687
8	LAND INVESTMENT	LINE 5E x LINE 6C	\$6.88		-	\$6.88
9	BUILDING INVESTMENT	LINE 5E x LINE 7D	-	\$109.64	-	\$109.64
10	TOTAL UNIT INVESTMENT	LINE 5E + LINE 8C + LINE 9D	\$6.88	\$109.64	\$649.81	\$766.33
11	WEIGHTED UNIT INVESTMENT	INE 10 x WP 8.0, PG 1, LINE 26F	\$2.01	\$32.01	\$189.72	\$223.74

WORKPAPER 4.1 PAGE 1 OF 3

## PHYSICAL COLLOCATION Verizon - New Jersey FCC - 1

	<u>A</u>	<u>B</u>	<u>c</u>	Ō	<u>E</u>	<u>F</u>
	ITEM	SOURCE	LAND	BLDG	CKT EQPT.	TOTAL INVEST
1	TOTAL UNIT INVESTMENT	WP 4.0, PG 2 LINE 10	\$6.88	\$109.64	\$649.81	\$766.33
2	DEPRECIATION	LINE 1 X WP 8.0 - ACF FACTOR	\$0.00	\$2.38	\$25.87	\$28.25
3	COST OF MONEY	LINE 1 X WP 8.0 - ACF FACTOR	\$0.78	\$9.13	\$35.84	\$45.75
4	INCOME TAX	LINE 1 X WP 8.0 - ACF FACTOR	\$0.40	\$4.74	\$18.59	\$23.73
5	MAINTENANCE	LINE 1 X WP 8.0 - ACF FACTOR	\$0.18	\$2.83	\$39.04	\$42.04
6	ADMINISTRATION	LINE 1 X WP 8.0 - ACF FACTOR	\$0.30	\$4.74	\$28.05	\$33.09
7	OTHER TAX	LINE 1 X WP 8.0 - ACF FACTOR	<u>\$0.09</u>	<u>\$1.36</u>	<u>\$8.06</u>	\$9.50
8	ANNUAL DIRECT COST	SUM (LINE 2 THRU LINE 7)	\$1.74	\$25.17	\$155.44	\$182.36
9	WEIGHTED UNIT INVESTMENT	LINE 8 x WP 8.0, PG 1, LINE 26F	\$0.51	\$7.35	\$45.38	\$53.24

WORKPAPER 4.1 PAGE 3 OF 3

#### PHYSICAL COLLOCATION Verizon - New Jersey FCC NO. 1

## DC POWER - GREATER THAN 60 AMPS

	A	В	c	D	Ę	E
LINE NO.	<u>ITEM</u>	SOURCE	METRO	URBAN	SUBURBAN	RURAL
	Microprocessor Plant (BUSS BAR)					
1	AMP	Englanding.	5.000	2,600	2,600	600
2	Material	Engineering Engineering	\$27,154	\$23.879	\$23,879	\$18,349
3	Unit Investment Per AMP	(L2 / L1)	\$27,134 \$5.43	\$9.18	\$9.18	\$30.58
4	Statewide Weighting	WP 8.0, Col F, Lns 27-30	0.3097	0.4901	0.1724	0.0278
5	Statewide Unit Investment Per AMP	\$8.62	\$1.68	\$4.50	\$1.58	\$0.85
	Rectifiers					
6	Quantity	Engineering	6	6	6	7
7	AMPS per unit	Engineering	400	200	200	50
8	Tot. AMPS	( L6 <b>* L</b> 7)	2,400	1,200	1,200	350
9	Utilization	(L6-1) / L6)	83.33%	83.33%	83.33%	85.71%
10	Material	Engineering	\$55,502	\$42,046	\$42,046	\$15,900
11	Total Investment	(L10 / L9)	\$66,602	\$50,455	\$50,455	\$18,550
12	Unit Investment Per AMP	(L11 / L8)	\$27.75	\$42.05	\$42.05	\$53.00
13	Statewide Weighting	WP 8.0, Col F, Lns 27-30	0.3097	0.4901	0.1724	0.0278
14	Statewide Unit Investment Per AMP	\$37.92	\$8.59	\$20.61	\$7.25	\$1.47
	Batteries					
15	Strings	Engineering	3	3	3	2
16	AMPs per String	Engineering	688	310	310	310
17	Tot. AMPS	(L15 ° L16)	2,064	930	930	620
18	Total Investment	Engineering	\$80,952	\$34,965	\$34,965	\$23,310
19	Unit Investment Per AMP	(L18 / L17)	\$39.22	\$37.60	\$37.60	\$37.60
20	Statewide Weighting	WP 8.0, Col F, Lns 27-30	0.3097	0.4901	0.1724	0.0278
21	Statewide Unit Investment Per AMP	\$38.10	\$12.15	\$18.43	\$6.48	\$1.05
	Automatic Breaker					
22	AMP per Breaker	Engineering	1.600	1.200	800	400
23	Total Investment	Engineering	\$50,000	\$40,000	\$35,000	\$20,000
24	Unit Investment Per AMP	(L23 / L22)	\$31.25	\$33.33	\$43.75	\$50.00
25	Statewide Weighting	WP 8.0, Col F, Lns 27-30	0.3097	0.4901	0.1724	0.0278
26	Statewide Unit Investment Per AMP	\$34.95	\$9.68	\$16.34	\$7.54	\$1.39
20	Glatewide Offic Hivesanierit i et Awii	404.30	Ψ5.00	Ψ10:0-	<b>4</b> 7.54	<b>\$</b> 1.55
	Power Distribution Service Cabinet					
27	Amps	Engineering	1,600	800	400	400
28	Material	Engineering	\$13,976	\$7,788	\$5,677	\$3,467
29	Unit Investment Per AMP	(L28 / L27)	\$8.74	\$9.74	\$14.19	\$8.67
30	Statewide Weighting	WP 8.0, Col F, Lns 27-30	0.3097	0.4901	0.1724	0.0278
31	Statewide Unit Investment Per AMP	\$10.16	\$2.71	\$4.77	\$2.45	\$0.24
	Emergency engine/turbine (auto start)					
32	AMP Capacity	Engineering	2,605	1,736	1,111	434
33	Utilization	Engineering	70%	70%	70%	70%
34	Utilized AMPS	(L32 * L33)	1,824	1,215	778	304
35	Emerg. Engine Invest.	Engineering	\$130,765	\$78,249	\$53,871	\$41,874
36	Conduit/Emer Lights	Engineering	\$45,629	\$30.487	\$23,332	\$11,810
37	Total Investment	(L35 + L36)	\$176,394	\$108,736	\$77,203	\$53,684
38	Unit Investment Per AMP	(L37 / L34)	\$96.73	\$89.48	\$99.27	\$176.71
39	Statewide Weighting	WP 8.0, Col F, Lns 27-30	0.3097	0.4901	0.1724	0.0278
40	Statewide Unit Investment Per AMP	\$95.84	\$29.96	\$43.85	\$17.11	\$4.91
	Power Blood Distribution Day					
	Power Plant Distribution Bay		0.000		4 5-4	
41	AMP Capacity	Engineering	2,600	1,200	1,200	300
42	Material	Engineering	\$12,747	\$10,388	\$10,388	\$4,993
43	Unit Investment Per AMP	(L42 / L41)	\$4.90	\$8.66	\$8.66	\$16.64
44	Statewide Weighting	WP 8.0, Col F, Lns 27-30	0.3097	0.4901	0.1724	0.0278
45	Statewide Unit Investment Per AMP	\$7.72	\$1.52	\$4.24	\$1.49	\$0.46

Total Unit Investment - (Greater than 60

AMPs) -Sum Lines

(5C+14C+21C+26C+31C+40C + 45C)

\$233.31

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## PHYSICAL COLLOCATION Bell Atlantic - Pennsylvania FCC - 1

	A	B	<u>c</u>	D	<u>E</u>	<u>F</u>
	ITEM	SOURCE	LAND	BLDG	SWITCH EQPT.	TOTAL INVEST
1	TOTAL POWER PLANT UNIT INVESTMENT	WP 5.0, PG 3, LINE 10	-	-	\$248.83	\$248.83
2	EF&I FACTOR - FRC 377C	WP 8.0, PG 1, LINE 24G	-	-	2.7852	2.7852
3	INSTALLED INVESTMENT (NRC)	LINE 1 x LINE 2	-	-	\$693.05	\$693.05
4	UTILIZATION FACTOR	ENGINEERING	-	-	1.0000	1.0000
5	TOTAL IN-PLACE INVESTMENT	LINE 3 x LINE 4	-	-	\$693.05	<b>\$693</b> .05
6	LAND INVESTMENT FACTOR	WP 8.0, PG 1, LINE 22G	0.0081	-	-	0.0081
7	BUILDING INVESTMENT FACTOR	WP 8.0, PG 1, LINE 23G	-	0.1757	-	0.1757
8	LAND INVESTMENT	LINE 5E x LINE 6C	\$5.58		-	\$5.58
9	BUILDING INVESTMENT	LINE 5E x LINE 7D	-	\$121.78	-	\$121.78
10	TOTAL UNIT INVESTMENT	LINE 5E + LINE 8C + LINE 9D	\$5.58	\$121.78	\$693.05	\$820.41
11	WEIGHTED UNIT INVESTMENT	INE 10 x WP 8.0, PG 1, LINE 26G	\$1.62	\$35.34	\$201.12	\$238.08

WORKPAPER 5.0 PAGE 1 OF 3

### PHYSICAL COLLOCATION Verizon - Pennsylvania FCC - 1

	<u>A</u>	<u>B</u>	<u>c</u>	D	Ē	<u>F</u>
	<u>ITEM</u>	SOURCE	LAND	BLDG	CKT EQPT.	TOTAL INVEST
1	TOTAL UNIT INVESTMENT	WP 5.0, PG 2 LINE 10	\$5.58	\$121.78	\$693.05	\$820.41
2	DEPRECIATION	LINE 1 X WP 8.0 - ACF FACTOR	\$0.00	\$2.50	\$27.84	\$30.34
3	COST OF MONEY	LINE 1 X WP 8.0 - ACF FACTOR	\$0.63	\$10.18	\$37.78	\$48.59
4	INCOME TAX	LINE 1 X WP 8.0 - ACF FACTOR	\$0.34	\$5.42	\$20.12	\$25.88
5	MAINTENANCE	LINE 1 X WP 8.0 - ACF FACTOR	\$0.16	\$3.46	\$39.75	\$43.36
6	ADMINISTRATION	LINE 1 X WP 8.0 - ACF FACTOR	\$0.22	\$4.86	\$27.65	\$32.73
7	OTHER TAX	LINE 1 X WP 8.0 - ACF FACTOR	<u>\$0.26</u>	<u>\$5.74</u>	<u>\$1.39</u>	<u>\$7.39</u>
8	ANNUAL DIRECT COST	SUM (LINE 2 THRU LINE 7)	\$1.61	\$32.15	\$154.52	\$188.28
9	WEIGHTED UNIT INVESTMENT	LINE 8 x WP 6.0, PG 1, LINE 26G	\$0.47	\$9.33	\$44.84	\$54.64

WORKPAPER 5.0 PAGE 3 OF 3

#### PHYSICAL COLLOCATION Verizon - Pennsylvania FCC NO. 1

	A	В	ç	D	E	E
		_	_			
LINE NO.	ITEM	SOURCE	METRO	URBAN	SUBURBAN	RURAL
	Microprocessor Plant (BUSS BAR)					
1	AMP	Engineering	5,000	2,600	2,600	600
2	Material	Engineering	\$27,154	\$23,879	\$23,879	\$18.349
3 4	Unit Investment Per AMP	(L2 / L1)	\$5.43	\$9.18 0.4539	\$9.18 0.2058	\$30.58 0.1347
5	Statewide Weighting Statewide Unit Investment Per AMP	WP 8.0, Col G, Lns 27-30 \$11.29	0.2056 \$1.12	\$4.17	\$1.89	\$4.12
3	Statewide Other Hyesunetic Fer Alvie	\$11.23	\$1.12	<b>9-1.17</b>	Ψ1.03	Ψ4.1Z
	Rectifiers					
6	Quantity	Engineering	6	6	6	7
7	AMPS per unit	Engineering	400	200	200	50
8	Tot. AMPS	( L6 * L7)	2,400	1,200	1,200	350
9	Utilization	(L6-1) / L6)	83.33% \$55,502	83.33% \$42,046	83.33% \$42,046	85.71% \$15,900
10 11	Material Total Investment	Engineering (L10 / L9)	\$66,602	\$50,455	\$50.455	\$18,550
12	Unit Investment Per AMP	(L10 / L9)	\$27.75	\$42.05	\$42.05	\$53.00
13	Statewide Weighting	WP 8.0, Col G, Lns 27-30	0.2056	0.4539	0.2058	0.1347
14	Statewide Unit Investment Per AMP	\$40.58	\$5.71	\$19.08	\$8.65	\$7.14
	<b>5</b> :					
45	<u>Batteries</u>	Farinasias	2	3	•	•
15	Strings AMPs per String	Engineering Engineering	3	3 310	3 310	2 310
16 17	Tot. AMPS	(L15 * L16)	688 2.064	930	930	620
18	Total Investment	Engineering	\$80,952	\$34,965	\$34,965	\$23,310
19	Unit Investment Per AMP	(L18 / L17)	\$39.22	\$37.60	\$37.60	\$37.60
20	Statewide Weighting	WP 8.0, Col G, Lns 27-30	0.2056	0.4539	0.2058	0.1347
21	Statewide Unit Investment Per AMP	\$37.93	\$8.06	\$17.07	\$7.74	\$5.06
	Automatic Breaker					
22	AMP per Breaker	Engineering	1,600	1,200	800	400
23	Total Investment	Engineering	\$50,000	\$40,000	\$35,000	\$20,000
24 25	Unit Investment Per AMP	(L23 / L22)	\$31.25	\$33.33	\$43.75 0.2058	\$50.00
	Statewide Weighting	WP 8.0, Col G, Lns 27-30	0.2056	0.4539	\$9.00	0.1347
26	Statewide Unit Investment Per AMP	\$37.29	\$6.43	\$15.13	\$9.00	\$6.74
	Power Distribution Service Cabinet					
27	Amps	Engineering	1,600	800	400	400
28	Material	Engineering	\$13,976	\$7,788	<b>\$</b> 5,677	\$3,467
29	Unit Investment Per AMP	(L28 / L27)	\$8.74	\$9.74	\$14.19	\$8.67
30	Statewide Weighting	WP 8.0, Col G, Lns 27-30	0.2056	0.4539	0.2058	0.1347
31	Statewide Unit Investment Per AMP	\$10.30	\$1.80	\$4.42	\$2.92	\$1.17
	Emergency engine/turbine (auto start)					
32	AMP Capacity	Engineering	2,605	1,736	1,111	434
33	Utilization	Engineering	70%	70%	70%	70%
34	Utilized AMPS	(L32 * L33)	1,824	1,215	778	304
35	Emerg. Engine Invest.	Engineering	\$130,765	\$78,249	\$53,871	\$41,874
36	Conduit/Emer Lights	Engineering	\$45,629	\$30,487	\$23,332	\$11,810
37	Total Investment	(L35 + L36)	\$176,394	\$108,736	\$77,203	\$53,684
38	Unit Investment Per AMP	(L37 / L34)	\$96.73	\$89.48	\$99.27	\$176.71
39	Statewide Weighting	WP 8.0, Col G, Lns 27-30	0.2056	0.4539	0.2058	0.1347
40	Statewide Unit Investment Per AMP	\$104.74	\$19.89	\$40.61	\$20.43	\$23.80
	<b>Battery Distribution Fuse Bay</b>					
41	AMP Capacity	Engineering	800	800	800	800
42	Material	Engineering	\$5,355	\$5,355	\$5,355	\$5,355
43	Unit Investment Per AMP	(L42 / L41)	\$6.69	\$6.69	\$6.69	\$6.69
44	Statewide Weighting	Service Costs	0.2056	0.4539	0.2058	0.1347
45	Statewide Unit Investment Per AMP	\$6.69	\$1.38	\$3.04	\$1.38	\$0.90
	Total Unit Investment - (Less than or					
46	Equal to 60 AMP's) - Sum Lines	\$248.83				
	(5C+14C+21C+26C+31C+40C+45C)					

WORKPAPER 5.1 PAGE 2 OF 3

# PHYSICAL COLLOCATION Verizon - Pennsylvania FCC - 1

	<u>A</u>	<u>B</u>	<u>c</u>	<u>D</u>	<u>E</u>	<u>F</u>
	<u>ITEM</u>	SOURCE	LAND	BLDG	SWITCH EQPT.	TOTAL INVEST
1	TOTAL POWER PLANT UNIT INVESTMENT	WP 5.1, PG 3, LINE 10	-	-	\$251.10	\$251.10
2	EF&I FACTOR - FRC 377C	WP 8.0, PG 1, LINE 24G	-	-	2.7852	2.7852
3	INSTALLED INVESTMENT (NRC)	LINE 1 x LINE 2	-	-	\$699.37	\$699.37
4	UTILIZATION FACTOR	ENGINEERING	-	-	1.0000	1.0000
5	TOTAL IN-PLACE INVESTMENT	LINE 3 x LINE 4	-	-	\$699.37	\$699.37
6	LAND INVESTMENT FACTOR	WP 8.0, PG 1, LINE 22G	0.0081	-	•	0.0081
7	BUILDING INVESTMENT FACTOR	WP 8.0, PG 1, LINE 23G	-	0.1757	-	0.1757
8	LAND INVESTMENT	LINE 5E x LINE 6C	\$5.63		-	\$5.63
9	BUILDING INVESTMENT	LINE 5E x LINE 7D	-	\$122.89	-	\$122.89
10	TOTAL UNIT INVESTMENT	LINE 5E + LINE 8C + LINE 9D	\$5.63	\$122.89	\$699.37	\$827.89
11	WEIGHTED UNIT INVESTMENT	INE 10 x WP 8.0, PG 1, LINE 26G	\$1.64	\$35.66	\$202.95	\$240.24

WORKPAPER 5.1 PAGE 1 OF 3

## PHYSICAL COLLOCATION Verizon - Pennsylvania FCC - 1

	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	Ē
	<u>ITEM</u>	SOURCE	LAND	BLDG	CKT EQPT.	TOTAL INVEST
1	TOTAL UNIT INVESTMENT	WP 5.1, PG 2 LINE 10	\$5.63	\$122.89	\$699.37	\$827.89
2	DEPRECIATION	LINE 1 X WP 8.0 - ACF FACTOR	\$0.00	\$2.52	\$28.10	\$30.62
3	COST OF MONEY	LINE 1 X WP 8.0 - ACF FACTOR	\$0.64	\$10.27	\$38.12	\$49.03
4	INCOME TAX	LINE 1 X WP 8.0 - ACF FACTOR	\$0.34	\$5.47	\$20.30	\$26.11
5	MAINTENANCE	LINE 1 X WP 8.0 - ACF FACTOR	\$0.16	\$3.49	\$40.11	\$43.76
6	ADMINISTRATION	LINE 1 X WP 8.0 - ACF FACTOR	\$0.22	\$4.90	\$27.90	\$33.03
7	OTHER TAX	LINE 1 X WP 8.0 - ACF FACTOR	<u>\$0.27</u>	<u>\$5.79</u>	<u>\$1.40</u>	<u>\$7.45</u>
8	ANNUAL DIRECT COST	SUM (LINE 2 THRU LINE 7)	\$1.63	\$32.44	\$155.93	\$190.00
9	WEIGHTED UNIT INVESTMENT	LINE 8 x WP 8.0, PG 1, LINE 26G	\$0.47	\$9.41	\$45.25	\$55.14

WORKPAPER 5.1 PAGE 3 OF 3

#### PHYSICAL COLLOCATION Verizon - Pennsylvania FCC NO. 1

## DC POWER - GREATER THAN 60 AMPS

	A	6	č	D	E	<u>F</u>
LINE NO.	ITEM	SOURCE	METRO	URBAN	SUBURBAN	RURAL
	Microprocessor Plant (BUSS BAR)					
1	AMP	Engineering	5,000	2,600	2,600	600
2	Material	Engineering	\$27,154	\$23,879	\$23,879	\$18,349
3	Unit Investment Per AMP	(L2 / L1)	\$5.43	\$9.18	\$9.18	\$30.58
4	Statewide Weighting	WP 8.0. Col G, Lns 27-30	0.2056	0 4539	0.2058	0.1347
5	Statewide Unit Investment Per AMP	\$11.29	\$1.12	\$4.17	\$1.89	\$4.12
	Rectifiers					
6	Quantity	Engineering	6	6	6	7
7	AMPS per unit	Engineering	400	200	200	50
8	Tot. AMPS	( L6 * L7)	2,400	1,200	1,200	350
9	Utilization	(L6-1) / L6)	83.33%	83.33%	83.33%	85.71%
10	Material	Engineering	\$55,502	\$42,046	\$42,046	\$15,900
11	Total investment	(L10 / L9)	\$66,602	\$50,455	\$50,455	\$18,550
12	Unit Investment Per AMP			\$42.05	\$42.05	
13	Statewide Weighting	(L11 / L8) WP 8.0, Col G, Lns 27-30	\$27.75 0.2056	0.4539	0.2058	\$53.00 0.1347
14	Statewide Unit Investment Per AMP	\$40.58	\$5.71	\$19.08	\$8.65	<u>0.1347</u> \$7.14
• 7		V 10.55	••••	475.55	40.00	<b>V</b> 1.1.5
15	<u>Batteries</u> Strings	Engineering	3	3	3	2
16	AMPs per String	Engineering	688	310	310	310
17	Tot. AMPS	(L15 * L16)	2,064	930	930	620
18	Total Investment		\$80,952	\$34.965	\$34,965	\$23,310
19	Unit Investment Per AMP	Engineering (L18 / L17)		\$37.60	\$37.60	
20	Statewide Weighting	WP 8.0, Col G, Lns 27-30	\$39.22 0.2056	0.4539	0.2058	\$37.60 0.1347
21	Statewide Unit Investment Per AMP	\$37.93	\$8.06	\$17.07	\$7.74	\$5.06
	Automatic Breaker					
22	AMP per Breaker	Engineering	1,600	1,200	800	400
23	Total Investment		•	\$40,000		
23 24	Unit Investment Per AMP	Engineering	\$50,000		\$35,000	\$20,000
25		(L23 / L22)	\$31.25	\$33.33	\$43.75	\$50.00
	Statewide Weighting	WP 8.0, Col G, Lns 27-30	0.2056	0.4539	0.2058	0.1347
26	Statewide Unit Investment Per AMP	\$37.29	\$6.43	\$15.13	\$9.00	\$6.74
	Power Distribution Service Cabinet					
27	Amps	Engineering	1,600	800	400	400
28	Material	Engineering	\$13,976	\$7,788	\$5,677	\$3,467
29	Unit Investment Per AMP	(L28 / L27)	\$8.74	\$9.74	\$14.19	\$8.67
30	Statewide Weighting	WP 8.0, Col G, Lns 27-30	0.2056	0.4539	0.2058	0.1347
31	Statewide Unit Investment Per AMP	\$10.30	\$1.80	\$4.42	\$2.92	\$1.17
	Emergency engine/turking (gute start)					
22	Emergency engine/turbine (auto start)	Conincesies	2 605	4 700	4 4 4 4	
32	AMP Capacity	Engineering	2,605	1,736	1,111	434
33	Utilization	Engineering	70%	70%	70%	70%
34	Utilized AMPS	(L32 • L33)	1,824	1,215	778	304
35	Emerg. Engine Invest.	Engineering	\$130,765	\$78,249	\$53,871	\$41,874
36	Conduit/Emer Lights	Engineering	\$45,629	\$30,487	\$23,332	\$11,810
37	Total Investment	(L35 + L36)	\$176,394	\$108,736	\$77.203	\$53,684
38	Unit Investment Per AMP	(L37 / L34)	\$96.73	\$89.48	\$99.27	\$176.71
39	Statewide Weighting	WP 8.0, Col G, Lns 27-30	0.2056	0.4539	0.2058	0 1347
40	Statewide Unit Investment Per AMP	\$104.74	\$19.89	\$40.61	\$20.43	\$23.80
	Power Plant Distribution Bay					
41	AMP Capacity	Engineering	2,600	1,200	1,200	300
42	Material					
43		Engineering (L42 / L41)	\$12,747	\$10,388	\$10,388	\$4,993 \$16.64
43 44	Unit Investment Per AMP Statewide Weighting	(L42 / L41) WP 8.0, Col G, Lns 27-30	\$4.90 0.2056	\$8.66 0.4539	\$8.66 0.2058	\$16.64 0.1347
45	Statewide Unit Investment Per AMP	\$8.96	\$1.01	\$3.93	\$1.78	\$2.24
45	STORIGE OF THE PRESCRIPTION OF THE PUBLIC	<b>40.00</b>	<b>₽1.01</b>	<b>4</b> 0.50	<b>#1.10</b>	ge.44

Total Unit Investment - (Greater than 60

46

AMPs) -Sum Lines

(5C+14C+21C+26C+31C+40C + 45C)

\$251.10

WORKPAPER 6.0 PAGE 2 OF 3

# PHYSICAL COLLOCATION Verizon - Virginia FCC - 1

	<u>A</u>	<u>B</u>	<u>c</u>	<u>D</u>	Ē	Ē
	<u>ITEM</u>	SOURCE	LAND	BLDG	SWITCH EQPT.	TOTAL INVEST
1	TOTAL POWER PLANT UNIT INVESTMENT	WP 6.0, PG 3, LINE 10	-	-	<b>\$249</b> .21	\$249.21
2	EF&I FACTOR - FRC 377C	WP 8.0, PG 1, LINE 24H	-	-	2.7852	2.7852
3	INSTALLED INVESTMENT (NRC)	LINE 1 x LINE 2	•	-	\$694.10	\$694.10
4	UTILIZATION FACTOR	ENGINEERING	-	-	1.0000	1.0000
5	TOTAL IN-PLACE INVESTMENT	LINE 3 x LINE 4	-	-	\$694.10	\$694.10
6	LAND INVESTMENT FACTOR	WP 8.0, PG 1, LINE 22H	0.0071	-	-	0.0071
7	BUILDING INVESTMENT FACTOR	WP 8.0, PG 1, LINE 23H	-	0.1282	-	0.1282
8	LAND INVESTMENT	LINE 5E x LINE 6C	\$4.94		-	\$4.94
9	BUILDING INVESTMENT	LINE 5E x LINE 7D	-	\$88.96	-	\$88.96
10	TOTAL UNIT INVESTMENT	LINE 5E + LINE 8C + LINE 9D	\$4.94	\$88.96	\$694.10	\$788.00
11	WEIGHTED UNIT INVESTMENT	INE 10 x WP 8.0, PG 1, LINE 26H	\$0.77	\$13.83	\$107.92	\$122.53

WORKPAPER 6.0 PAGE 1 OF 3

# PHYSICAL COLLOCATION Verizon - Virginia FCC - 1

	<u>A</u>	<u>B</u>	<u>c</u>	<u>D</u>	E	Ē
	ITEM	SOURCE	LAND	BLDG	CKT EQPT.	TOTAL INVEST
1	TOTAL UNIT INVESTMENT	WP 6.0, PG 2 LINE 10	\$4.94	\$88.96	\$694.10	\$788.00
2	DEPRECIATION	LINE 1 X WP 8.0 - ACF FACTOR	\$0.00	\$1.94	\$27.56	\$29.50
3	COST OF MONEY	LINE 1 X WP 8.0 - ACF FACTOR	\$0.56	\$7.42	\$38.98	\$46.96
4	INCOME TAX	LINE 1 X WP 8.0 - ACF FACTOR	\$0.27	\$3.55	\$18.64	\$22.45
5	MAINTENANCE	LINE 1 X WP 8.0 - ACF FACTOR	\$0.17	\$3.06	<b>\$</b> 37.17	\$40.40
6	ADMINISTRATION	LINE 1 X WP 8.0 - ACF FACTOR	\$0.19	\$3.46	\$27.02	\$30.67
7	OTHER TAX	LINE 1 X WP 8.0 - ACF FACTOR	\$0.04	\$0.72	\$5.64	<u>\$6.40</u>
8	ANNUAL DIRECT COST	SUM (LINE 2 THRU LINE 7)	\$1.23	\$20.15	\$155.02	\$176.40
9	WEIGHTED UNIT INVESTMENT	LINE 8 x WP 8.0, PG 1, LINE 26H	\$0.19	\$3.13	\$24.10	\$27.43

WORKPAPER 6.0 PAGE 3 OF 3

#### PHYSICAL COLLOCATION Verizon - Virginia FCC NO. 1

	<u>50.00</u>	ER LEGO THAT ON EGO!		<u></u>		
	A	<u>8</u>	<u>c</u>	D	E	Ē
LINE NO.	ITEM	SOURCE	METRO	URBAN	SUBURBAN	RURAL
LINE NO.	I CM	<u> </u>	MEINO	SILDAN	OODONDAN	HUIGHE
	Microprocessor Plant (BUSS BAR)					
1	AMP	Engineering	5,000	2,600	2,600	600
2	Material	Engineering	\$27,154	\$23,879	\$23,879	\$18,349
3	Unit Investment Per AMP	(L2 / L1)	\$5.43	<b>\$</b> 9 18	\$9.18	\$30.58
4	Statewide Weighting	WP 8.0, Col H, Lns 27-30	<u>0.1585</u>	0.4362	0.2869	0.1184
5	Statewide Unit Investment Per AMP	\$11.12	\$0.86	\$4.01	\$2.63	\$3.62
	Rectifiers					
6	Quantity	Engineering	6	6	6	7
7	AMPS per unit	Engineering	400	200	200	50
8	Tot. AMPS	( L6 * L7)	2,400	1,200	1,200	350
9	Utilization	(L6-1) / L6)	83.33%	83.33%	83.33%	85.71%
10	Material	Engineering	\$55,502	\$42,046	\$42,046	\$15,900
11	Total Investment	(L10/L9)	\$66,602	\$50,455	\$50,455	\$18,550
12	Unit Investment Per AMP	(L11/L8)	\$27.75	\$42.05	\$42.05	\$53.00
13	Statewide Weighting	WP 8.0, Col H, Lns 27-30	0.1585	0.4362	0.2869	0.1184
14	Statewide Unit Investment Per AMP	\$41.08	\$4.40	\$18.34	\$12.06	\$6.28
4.5	<u>Batteries</u>		_	_		_
15	Strings	Engineering	3	3	3	2
16	AMPs per String	Engineering	688	310	310	310
17 18	Tot. AMPS	(L15 * L16)	2,064	930	930	620
19	Total Investment	Engineering	\$80,952	\$34,965	\$34,965	\$23,310
20	Unit Investment Per AMP Statewide Weighting	(L18 / L17) WP 8.0, Col H, Lns 27-30	\$39.22 0.1585	\$37.60 0.4362	\$37.60 0.2869	\$37.60 0 1184
21	Statewide Unit Investment Per AMP	\$37.85	\$6.22	\$16.40	\$10.79	\$4.45
	Automotic Panalina					
22	Automatic Breaker	E discourse	4.000	4 000	000	400
22 23	AMP per Breaker	Engineering	1,600 \$50,000	1,200	800 \$35,000	400
23 24	Total Investment Unit Investment Per AMP	Engineering (L23 / L22)		\$40,000 \$33.33	\$43.75	\$20,000 \$50.00
25	Statewide Weighting	WP 8.0, Coi H, Lns 27-30	\$31.25 0.1585	0.4362	0.2869	0.1184
26	Statewide Unit Investment Per AMP	\$37.97	\$4.95	\$14.54	<b>\$</b> 12.55	\$5.92
	Power Distribution Service Cabinet					
27	Amps	Engineering	1,600	800	400	400
28	Material	Engineering	\$13,976	\$7,788	<b>\$5</b> ,677	\$3,467
29	Unit Investment Per AMP	(L28 / L27)	\$8.74	\$9.74	\$14.19	\$8.67
30	Statewide Weighting	WP 8.0, Col H, Lns 27-30	0.1585	0.4362	0.2869	0.1184
31	Statewide Unit Investment Per AMP	\$10.73	\$1.38	\$4.25	\$4.07	\$1.03
•	CHAICHIGO DINI NITODONICIA I CI PARE	\$10.70	Ψ1.00	<b>4</b> 4.23	Ψ1.07	4,.00
	Emergency engine/turbine (auto start)					
32	AMP Capacity	Engineering	2,605	1,736	1,111	434
33	Utilization	Engineering	70%	70%	70%	70%
34	Utilized AMPS	(L32 * L33)	1,824	1,215	778	304
35	Emerg. Engine Invest.	Engineering	\$130,765	\$78,249	\$53,871	\$41,874
36	Conduit/Emer Lights	Engineering	\$45,629	\$30,487	\$23,332	\$11,810
37	Total Investment	(L35 + L36)	\$176,394	\$108,736	\$77,203	\$53,684
38	Unit Investment Per AMP	(L37 / L34)	\$96.73	\$89.48	\$99.27	\$176,71
39	Statewide Weighting	WP 8.0, Col H, Lns 27-30	0.1585	0.4362	0.2869	0.1184
40	Statewide Unit Investment Per AMP	\$103.77	<b>\$15.33</b>	\$39.03	\$28.48	\$20.92
	<b>Battery Distribution Fuse Bay</b>					
41	AMP Capacity	Engineering	800	800	800	800
42	Material	Engineering	\$5,355	\$5,355	\$5,355	\$5,355
43	Unit Investment Per AMP	(L42 / L41)	\$6.69	\$6.69	\$6.69	\$6.69
44	Statewide Weighting	WP 8.0, Col H, Lns 27-30	0.1585	0.4362	0.2869	0.1184
45	Statewide Unit Investment Per AMP	\$6.69	\$1.06	\$2.92	\$1.92	\$0.79
	Total Unit Investment - (Less than or					
46	Equal to 60 AMP's) - Sum Lines	\$249.21				
	(5C+14C+21C+26C+31C+40C+45C)					

WORKPAPER 6.1 PAGE 2 OF 3

# PHYSICAL COLLOCATION Verizon - Virginia FCC - 1

	<u>A</u>	<u>B</u>	<u>c</u>	<u>D</u>	<u>E</u>	<u>F</u>
	ITEM	SOURCE	LAND	BLDG	SWITCH EQPT.	TOTAL INVEST
1	TOTAL POWER PLANT UNIT INVESTMENT	WP 6.1, PG 3, LINE 10	-	-	\$251.52	\$251.52
2	EF&I FACTOR - FRC 377C	WP 8.0, PG 1, LINE 24H	-	-	2.7852	2.7852
3	INSTALLED INVESTMENT (NRC)	LINE 1 x LINE 2	-	-	\$700.54	\$700.54
4	UTILIZATION FACTOR	ENGINEERING	-	-	1.0000	1.0000
5	TOTAL IN-PLACE INVESTMENT	LINE 3 x LINE 4	-	-	\$700.54	\$700.54
6	LAND INVESTMENT FACTOR	WP 8.0, PG 1, LINE 22H	0.0071	-	-	0.0071
7	BUILDING INVESTMENT FACTOR	WP 8.0, PG 1, LINE 23H	-	0.1282	-	0.1282
8	LAND INVESTMENT	LINE 5E x LINE 6C	\$4.99		-	\$4.99
9	BUILDING INVESTMENT	LINE 5E x LINE 7D	-	\$89.79	-	\$89.79
10	TOTAL UNIT INVESTMENT	LINE 5E + LINE 8C + LINE 9D	\$4.99	\$89.79	\$700.54	\$795.31
11	WEIGHTED UNIT INVESTMENT	INE 10 x WP 8.0, PG 1, LINE 26G	\$0.78	\$13.96	\$108.93	\$123.66

WORKPAPER 6.1 PAGE 1 OF 3

# PHYSICAL COLLOCATION Verizon - Virginia FCC - 1

	<u>A</u>	<u>B</u>	Ē	D	Ē	<u>F</u>
	ITEM	SOURCE	LAND	BLDG	CKT EQPT.	TOTAL INVEST
1	TOTAL UNIT INVESTMENT	WP 6.1, PG 2 LINE 10	\$4.99	\$89.79	\$700.54	\$795.31
2	DEPRECIATION	LINE 1 X WP 8.0 - ACF FACTOR	\$0.00	\$1.96	\$27.82	\$29.78
3	COST OF MONEY	LINE 1 X WP 8.0 - ACF FACTOR	\$0.56	\$7.49	\$39.34	\$47.39
4	INCOME TAX	LINE 1 X WP 8.0 - ACF FACTOR	\$0.27	\$3.58	\$18.81	\$22.66
5	MAINTENANCE	LINE 1 X WP 8.0 - ACF FACTOR	\$0.17	\$3.09	\$37.52	\$40.78
6	ADMINISTRATION	LINE 1 X WP 8.0 - ACF FACTOR	\$0.19	\$3.49	\$27.27	\$30.96
7	OTHER TAX	LINE 1 X WP 8.0 - ACF FACTOR	\$0.04	\$0.73	\$5.69	<u>\$6.46</u>
8	ANNUAL DIRECT COST	SUM (LINE 2 THRU LINE 7)	\$1.24	\$20.34	\$156.46	\$178.03
9	WEIGHTED UNIT INVESTMENT	LINE 8 x WP 8.0, PG 1, LINE 26H	<b>\$0</b> .19	\$3.16	\$24.33	\$27.68

WORKPAPER 6.1 PAGE 3 OF 3

#### PHYSICAL COLLOCATION Verizon - Virginia FCC NO. 1

## DC POWER - GREATER THAN 60 AMPS

	<u>A</u>	8	<u>c</u>	D	<u>E</u>	Ē
LINE NO.	ITEM	SOURCE	METRO	URBAN	SUBURBAN	RURAL
	Microprocessor Plant (BUSS BAR)					
1	AMP	Engineering	5,000	2,600	2,600	600
2	Material	Engineering	\$27,154	\$23,879	\$23,879	\$18,349
3	Unit Investment Per AMP	(L2 / L1)	\$5.43	\$9.18	\$9.18	\$30.58
4	Statewide Weighting	WP 8.0, Col H, Lns 27-30	0.1585	0.4362	0.2869	0.1184
5	Statewide Unit Investment Per AMP	\$11.12	\$0.86	\$4.01	\$2.63	\$3.62
	Rectifiers					
6	Quantity	Engineering	6	6	6	7
7	AMPS per unit	Engineering	400	200	200	50
8	Tot. AMPS	(L6 *L7)	2,400	1,200	1,200	350
9	Utilization	(L6-1) / L6)	83.33%	83.33%	83.33%	85.71%
10	Material	Engineering	\$55,502	\$42,046	\$42,046	\$15,900
11	Total Investment	(L10 / L9)	\$66,602	\$50,455	\$50,455	\$18,550
12	Unit Investment Per AMP	(L11 / L8)	\$27.75	\$42.05	\$42.05	\$53.00
13	Statewide Weighting	WP 8.0, Col H, Lns 27-30	0.1585	0.4362	0 2869	0.1184
14	Statewide Unit Investment Per AMP	\$41.08	\$4.40	\$18.34	\$12.06	\$6.28
	Batteries					
15	Strings	Engineering	3	3	3	2
16	AMPs per String	Engineering	688	310	310	310
17	Tot. AMPS	(L15 * L16)	2,064	930	930	620
18	Total Investment	Engineering	\$80,952	\$34,965	\$34,965	\$23,310
19	Unit Investment Per AMP	(L18 / L17)	\$39.22	\$37.60	\$37.60	\$37.60
20	Statewide Weighting	WP 8.0, Col H, Lns 27-30	0.1585	0.4362	0.2869	0.1184
21	Statewide Unit Investment Per AMP	\$37.85	\$6.22	\$16,40	\$10.79	<b>\$4.4</b> 5
	Automatic Breaker					
22	AMP per Breaker	Engineering	1,600	1,200	800	400
23	Total Investment	Engineering	\$50,000	\$40,000	\$35,000	\$20,000
24	Unit Investment Per AMP	(L23 / L22)	\$31.25	\$33.33	\$43.75	\$50.00
25	Statewide Weighting	WP 8.0, Col H, Lns 27-30	0.1585	0.4362	0.2869	0.1184
26	Statewide Unit Investment Per AMP	\$37.97	\$4.95	\$14.54	\$12.55	<b>\$</b> 5.92
	Power Distribution Service Cabinet					
27	Amps	Engineering	1,600	800	400	400
28	Material	Engineering	\$13,976	\$7,788	\$5,677	\$3,467
29	Unit Investment Per AMP	(L28 / L27)	\$8.74	\$9.74	\$14.19	\$8.67
30	Statewide Weighting	WP 8.0, Col H, Lns 27-30	0.1585	0.4362	0.2869	0.1184
31	Statewide Unit Investment Per AMP	\$10.73	\$1.38	<b>\$</b> 4.25	\$4.07	\$1.03
	Emergency engine/turbine (auto start)					
32	AMP Capacity	Engineering	2,605	1,736	1,111	434
33	Utilization	Engineering	70%	70%	70%	70%
34	Utilized AMPS	(L32 * L33)	1,824	1,215	778	304
35	Emerg, Engine Invest.	Engineering	\$130,765	\$78,249	\$53,871	\$41,874
36	Conduit/Emer Lights	Engineering	\$45,629	\$30,487	\$23,332	\$11,810
37	Total Investment	(L35 + L36)	\$176,394	\$108,736	\$77,203	\$53,684
38	Unit Investment Per AMP	(L37 / L34)	\$96.73	\$89.48	\$99.27	\$176.71
39	Statewide Weighting	WP 8.0, Col H, Lns 27-30	0.1585	0.4362	0.2869	0.1184
40	Statewide Unit Investment Per AMP	\$103.77	\$15.33	\$39.03	\$28.48	\$20 92
	Power Plant Distribution Bay					
41	AMP Capacity	Engineering	2,600	1,200	1,200	300
42	Material	Engineering	\$12,747	\$10,388	\$10,388	\$4,993
43	Unit Investment Per AMP	(L42 / L41)	\$4.90	\$8.66	\$8.66	\$16.64
44	Statewide Weighting	WP 8.0, Coi H, Lns 27-30	0.1585	0.4362	0.2869	0.1184
45	Statewide Unit Investment Per AMP	\$9.01	\$0.78	\$3.78	\$2.48	\$1.97

Total Unit Investment - (Greater than 60

46

AMPs) -Sum Lines

<u>AMPs) -Sum Lines</u> \$251.52 (5C+14C+21C+26C+31C+40C + 45C)

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# PHYSICAL COLLOCATION Verizon - West Virginia FCC - 1

	<u>B</u>		Ē	D	<u>E</u>	<u>F</u>
	<u>ITEM</u>	SOURCE	LAND	BLDG	SWITCH EQPT.	TOTAL INVEST
1	TOTAL POWER PLANT UNIT INVESTMENT	WP 7.0, PG 3, LINE 10	-	-	\$304.02	\$304.02
2	EF&I FACTOR - FRC 377C	WP 8.0, PG 1, LINE 24I	-	•	2.7852	2.7852
3	INSTALLED INVESTMENT (NRC)	LINE 1 x LINE 2	-	-	\$846.76	\$846.76
4	UTILIZATION FACTOR	ENGINEERING	-	-	1.0000	1.0000
5	TOTAL IN-PLACE INVESTMENT	LINE 3 x LINE 4	-	-	\$846.76	\$846.76
6	LAND INVESTMENT FACTOR	WP 8.0, PG 1, LINE 22I	0.0103	-	-	0.0103
7	BUILDING INVESTMENT FACTOR	WP 8.0, PG 1, LINE 23I	-	0.2190	-	0.2190
8	LAND INVESTMENT	LINE 5E x LINE 6C	\$8.68		-	\$8.68
9	BUILDING INVESTMENT	LINE 5E x LINE 7D	-	\$185.41	-	\$185.41
10	TOTAL UNIT INVESTMENT	LINE 5E + LINE 8C + LINE 9D	\$8.68	\$185.41	\$846.76	\$1,040.86
11	WEIGHTED UNIT INVESTMENT	LINE 10 x WP 8.0, PG 1, LINE 26I	\$0.33	\$7.01	\$32.02	\$39.37

WORKPAPER 7.0 PAGE 1 OF 3

# PHYSICAL COLLOCATION Verizon - West Virginia FCC - 1

	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	Ē	<u>F</u>	
	ITEM	SOURCE	LAND	BLDG	CKT EQPT.	TOTAL INVEST	
1	TOTAL UNIT INVESTMENT	WP 7.0, PG 2 LINE 10	\$8.68	\$185.41	\$846.76	\$1,040.86	
2	DEPRECIATION	LINE 1 X WP 8.0 - ACF FACTOR	\$0.00	\$4.36	\$34.01	\$38.37	
3	COST OF MONEY	LINE 1 X WP 8.0 - ACF FACTOR	\$0.98	\$15.30	\$46.46	\$62.74	
4	INCOME TAX	LINE 1 X WP 8.0 - ACF FACTOR	\$0.51	\$7.94	\$24.10	\$32.54	
5	MAINTENANCE	LINE 1 X WP 8.0 - ACF FACTOR	\$0.25	\$5.36	\$56.26	\$61.87	
6	ADMINISTRATION	LINE 1 X WP 8.0 - ACF FACTOR	\$0.33	\$6.95	\$31.75	\$39.03	
7	OTHER TAX	LINE 1 X WP 8.0 - ACF FACTOR	\$0.09	\$1.98	\$9.07	<u>\$11.15</u>	
8	ANNUAL DIRECT COST	SUM (LINE 2 THRU LINE 7)	\$2.16	\$41.88	\$201.66	\$245.70	
9	WEIGHTED UNIT INVESTMENT	LINE 8 x WP 8.0, PG 1, LINE 26I	\$0.08	\$1.58	\$7.63	\$9.29	

WORKPAPER 7.0 PAGE 3 OF 3

#### PHYSICAL COLLOCATION Verizon - West Virginia FCC NO. 1

	<u>A</u>	₿	<u>c</u>	Đ	Ē
LINE NO.	ITEM	SOURCE	URBAN	SUBURBAN	RURAL
	Microgrammer Blook (BUCC BAB)				
1	Microprocessor Plant (BUSS BAR)  AMP	Engineering	2,600	2,600	600
2	Material	Engineering Engineering	\$23,879	\$23,879	\$18,349
3	Unit Investment Per AMP	(L2 / L1)	\$9.18	\$9.18	\$30.58
4	Statewide Weighting	WP 8.0, Col I, Lns 27-30	0.2135	0.2751	0.5115
5	Statewide Unit Investment Per AMP	\$20.13	\$1.96	\$2.53	\$15.64
3	Statewide Diffit Investment Fell AMP	\$20.13	\$1.50	φ2.33	\$15. <del>04</del>
	Rectifiers				
6	Quantity	Engineering	6	6	7
7	AMPS per unit	Engineering	200	200	50
8	Tot. AMPS	( L6 * L7)	1,200	1,200	350
9	Utilization	(L6-1) / L6)	83.33%	83.33%	85.71%
10	Material	Engineering	\$42,046	\$42.046	\$15,900
11 12	Total Investment Unit Investment Per AMP	(L10 / L9)	\$50,455 \$42.05	\$50,455 \$42.05	\$18,550 \$53.00
13	Statewide Weighting	(L11 / L8) WP 8.0, Col I, Lns 27-30	0.2135	0.2751	0.5115
14	Statewide Unit Investment Per AMP	\$47.65	\$8.98	\$11.57	\$27.11
1-4	Statewick Office and State of Party	447.00	90.30	411.01	Ψ27.11
	<u>Batteries</u>				
15	Strings	Engineering	3_	3	2
16	AMPs per String	Engineering	310	310	310
17	Tot. AMPS	(L15 * L16)	930	930	620
18 19	Total Investment	Engineering	\$34,965	\$34,965 \$37.60	\$23,310 \$37.60
20	Unit Investment Per AMP Statewide Weighting	(L18 / L17) WP 8.0, Col I, Lns 27-30	\$37.60 0.2135	0.2751	0.5115
	· <del></del>				
21	Statewide Unit Investment Per AMP	\$37.60	\$8.03	\$10.34	\$19.23
	Automatic Breaker				
22	AMP per Breaker	Engineering	1,200	800	400
23	Total investment	Engineering	\$40,000	\$35,000	\$20,000
24	Unit Investment Per AMP	(L23 / L22)	\$33.33	\$43.75	\$50.00
25	Statewide Weighting	WP 8.0, Col I, Lns 27-30	0.2135	0.2751	0.5115
26	Statewide Unit Investment Per AMP	\$44.73	\$7.12	\$12.04	\$25.58
	Bower Distribution Contino Cabinet				
27	Power Distribution Service Cabinet	Fasianasian	800	400	400
28	Amps Material	Engineering Engineering	\$7,788	\$5,677	\$3,467
29	Unit Investment Per AMP	(L28 / L27)	\$9.74	\$14.19	\$8.67
30	Statewide Weighting	WP 8.0, Col I, Lns 27-30	0.2135	0.2751	0.5115
31	Statewide Unit Investment Per AMP	\$10.42	\$2.08	\$3.90	\$4.43
20	Emergency engine/turbine (auto start)		4 700		40.4
32 33	AMP Capacity	Engineering	1,736	1,111	434 70%
33 34	Utilization Utilized AMPS	Engineering (L32 * L33)	70%	70% 778	304
35	Emerg. Engine Invest.	Engineering	1,215 \$78,249	\$53,871	\$41,874
36	Conduit/Emer Lights	Engineering	\$30,487	\$23,332	\$11,810
37	Total Investment	(L35 + L36)	\$108,736	\$77,203	\$53,684
38	Unit Investment Per AMP	(L37 / L34)	\$89.48	\$99.27	\$176.71
39	Statewide Weighting	WP 8.0, Col I, Lns 27-30	0.2135	0.2751	0.5115
40	Statewide Unit Investment Per AMP	\$136.80	\$19.10	\$27.31	\$90.39
41	Battery Distribution Fuse Bay	F	900	900	800
41 42	AMP Capacity Material	Engineering Engineering	800 \$5.355	800 \$5.355	800 \$6.355
42 43	Material Unit Investment Per AMP	Engineering (L42 / L41)	\$5,355 \$6.69	\$5,355 \$6,69	\$5,355 \$6.69
44	Statewide Weighting	WP 8.0, Col I, Lns 27-30	0.2135	0.2751	0.5115
45	Statewide Unit Investment Per AMP	\$6.69	\$1.43	\$1.84	\$3.42
73	Grandwide Offic investment Fer AMP	\$0.03	Ø1.43	g 1.04	φυ.4Z
	Total Unit Investment - (Less than or				
46	Equal to 60 AMP's) - Sum Lines	\$304.02			
	(5C+14C+21C+26C+31C+40C+45C)				

WORKPAPER 7.1 PAGE 2 OF 3

## PHYSICAL COLLOCATION Verizon - West Virginia FCC - 1

	<u>A</u> <u>B</u>		<u>c</u>	<u>D</u>	E	E
	<u>ITEM</u>	SOURCE	<u>LAND</u>	BLDG	SWITCH EQPT.	TOTAL INVEST
1	TOTAL POWER PLANT UNIT INVESTMENT	WP 7.1, PG 3, LINE 10	-	-	\$310.07	\$310.07
2	EF&I FACTOR - FRC 377C	WP 8.0, PG 1, LINE 24I	-	-	2.7852	2.7852
3	INSTALLED INVESTMENT (NRC)	LINE 1 x LINE 2	-	-	\$863.61	\$863.61
4	UTILIZATION FACTOR	ENGINEERING	-	-	1.0000	1.0000
5	TOTAL IN-PLACE INVESTMENT	LINE 3 x LINE 4	-	-	\$863.61	\$863.61
6	LAND INVESTMENT FACTOR	WP 8.0, PG 1, LINE 22	0.0103	-	-	0.0103
7	BUILDING INVESTMENT FACTOR	WP 8.0, PG 1, LINE 23I	-	0.2190	-	0.2190
8	LAND INVESTMENT	LINE 5E x LINE 6C	\$8.86		-	\$8.86
9	BUILDING INVESTMENT	LINE 5E x LINE 7D	-	\$189.10	-	\$189.10
10	TOTAL UNIT INVESTMENT	LINE 5E + LINE 8C + LINE 9D	\$8.86	\$189.10	\$863.61	\$1,061.56
11	WEIGHTED UNIT INVESTMENT	LINE 10 x WP 8.0, PG 1, LINE 261	\$0.33	\$7.15	\$32.66	\$40.15

WORKPAPER 7.1 PAGE 1 OF 3

# PHYSICAL COLLOCATION Verizon - West Virginia FCC - 1

	<u>A</u> B		<u>c</u>	<u>D</u>	<u>E</u>	<u>F</u>
	ITEM	SOURCE	LAND	BLDG	CKT EQPT.	TOTAL INVEST
1	TOTAL UNIT INVESTMENT	WP 7.1, PG 2 LINE 10	\$8.86	\$189.10	\$863.61	\$1,061.56
2	DEPRECIATION	LINE 1 X WP 8.0 - ACF FACTOR	\$0.00	\$4.44	\$34.69	\$39.13
3	COST OF MONEY	LINE 1 X WP 8.0 - ACF FACTOR	\$1.00	\$15.60	\$47.39	\$63.99
4	INCOME TAX	LINE 1 X WP 8.0 - ACF FACTOR	\$0.52	\$8.09	\$24.58	\$33.19
5	MAINTENANCE	LINE 1 X WP 8.0 - ACF FACTOR	\$0.26	\$5.47	\$57.38	\$63.10
6	ADMINISTRATION	LINE 1 X WP 8.0 - ACF FACTOR	\$0.33	\$7.09	\$32.38	\$39.81
7	OTHER TAX	LINE 1 X WP 8.0 - ACF FACTOR	\$0.09	\$2.02	\$9.25	\$11.37
8	ANNUAL DIRECT COST	SUM (LINE 2 THRU LINE 7)	\$2.20	\$42.72	\$205.67	\$250.59
9	WEIGHTED UNIT INVESTMENT	LINE 8 x WP 8.0, PG 1, LINE 26I	\$0.08	\$1.62	\$7.78	\$9.48

WORKPAPER 7.1 PAGE 3 OF 3

#### PHYSICAL COLLOCATION Verizon - West Virginia FCC NO. 1

#### DC POWER - GREATER THAN 60 AMPS

		O TOWER ONEATER HANG	<u> </u>		
A	₽	<u>c</u>	Ď	Ē	F
LINE NO.	ITEM	SOURCE	URBAN	SUBURBAN	RURAL
<u> </u>		3.5-3.2-			
	Microprocessor Plant (BUSS BAR)				
1	AMP	Engineering	2,600	2,600	600
2	Material	Engineering	\$23,879	\$23,879	\$18,349
3	Unit Investment Per AMP	(L2 / L1)	\$9.18	\$9.18	\$30.58
4	Statewide Weighting	WP 8.0, Col I, Lns 27-30	0.2135	0.2751	0.5115
5	Statewide Unit Investment Per AMP	\$20.13	\$1.96	\$2.53	\$15.64
		·			
	Rectifiers				
6	Quantity	Engineering	6	6	7
7	AMPS per unit	Engineering	200	200	50
8	Tot. AMPS	( L6 * L7)	1,200	1,200	350
9	Utilization	(L6-1) / L6)	83.33%	83.33%	85.71%
10	Material	Engineering	\$42,046	\$42,046	\$15,900
11	Total Investment	(L10 / L9)	\$50,455	\$50,455	\$18,550
12	Unit Investment Per AMP	(L11 / L8)	\$42.05	\$42.05	\$53.00
13	Statewide Weighting	WP 8.0, Col I, Lns 27-30	0.2135	0.2751	0.5115
14	Statewide Unit Investment Per AMP	\$47.65	\$8.98	\$11.57	\$27.11
1-	Clatewide Office in resulter in 1 of 74411		40.00	•	427
	Batteries				
15	Strings	Engineering	3	3	2
16	AMPs per String	Engineering	310	310	310
17	Tot. AMPS	(£15 * £16)	930	930	620
18	Total Investment	Engineering	\$34,965	\$34,965	\$23,310
19			\$37.60	\$37.60	\$37.60
20	Unit Investment Per AMP	(L18 / L17) WP 8.0, CoH, Lns 27-30		0.2751	0.5115
20	Statewide Weighting		0.2135		0.5115
21	Statewide Unit Investment Per AMP	\$37.60	\$8.03	\$10.34	\$19.23
	Automatic Breaker				
	Automatic Breaker	Fii	4 200	900	400
22	AMP per Breaker	Engineering	1,200	800	400
23	Total Investment	Engineering	\$40,000	\$35,000	\$20,000
24	Unit Investment Per AMP	(L23/L22)	\$33.33	\$43.75 0.0754	\$50.00
25	Statewide Weighting	WP 8.0, Col I, Lns 27-30	0.2135	0.2751	0.5115
26	Statewide Unit Investment Per AMP	\$44.73	\$7.12	\$12.04	\$25.58
	B Blakik ii G I G. biant				
	Power Distribution Service Cabinet				
27	Amps	Engineering	800	400	400
28	Material	Engineering	\$7,788	\$5,677	\$3,467
29	Unit Investment Per AMP	(L28 / L27)	\$9.74	\$14.19	\$8.67
30	Statewide Weighting	WP 8.0, Col I, Lns 27-30	0.2135	0.2751	0.5115
31	Statewide Unit Investment Per AMP	\$10.42	\$2.08	\$3.90	\$4.43
	Emergency engine/turbine (auto start)		. 7		
32	AMP Capacity	Engineering	1,736	1,111	434
33	Utilization	Engineering	70%	70%	70%
34	Utilized AMPS	(L32 * L33)	1,215	778	304
35	Emerg. Engine Invest.	Engineering	\$78,249	\$53,871	\$41,874
36	Conduit/Emer Lights	Engineering	\$30,487	\$23,332	\$11,810
37	Total Investment	(L35 + L36)	\$108,736	\$77,203	<b>\$</b> 53,684
38	Unit Investment Per AMP	(L37 / L34)	\$89.48	\$99.27	\$176.71
39	Statewide Weighting	WP 8.0, Col I, Lns 27-30	0.2135	0.2751	0.5115
40	Statewide Unit Investment Per AMP	\$136.80	\$19.10	\$27.31	\$90.39
	Power Plant Distribution Bay				
41	AMP Capacity	Engineering	1,200	1,200	300
42	Material	Engineering	\$10,388	\$10,388	\$4,993
43	Unit Investment Per AMP	(L42 / L41)	\$8.66	\$8.66	\$16.64
44	Statewide Weighting	WP 8.0. Col I, Lns 27-30	0.2135	0.2751	0.5115
45	Statewide Unit Investment Per AMP	\$12.74	\$1.85	\$2.38	\$8.51

Total Unit Investment - (Greater than 60

AMPs) -Sum Lines

\$310.07

(5C+14C+21C+26C+31C+40C + 45C)

#### WORKPAPER 8.0 PAGE 1 OF 1

# PHYSICAL COLLOCATION VERIZON: DC, DE, MD, NJ, PA, VA & WV FCC NO. 1

#### FACTORS

	<u>A</u>	₿	<u>c</u>	Ď	Ē	<u>F</u>	<u>G</u>	Ħ	Į.
LINE NO	ITEM	SOURCE	DC DATA	DE DATA	MD DATA	NJ <u>DATA</u>	PA DATA	VA DATA	WV DATA
	ANNUAL COST FACTOR								
	- Digital Switch - Power (2212.00)								
1	DEPRECIATION	SERVICE COSTS	0.0398	0.0398	0.0401	0.0398	0.0402	0.0397	0.0402
2	COST OF MONEY	SERVICE COSTS	0.0549	0.0552	0.0556	0.0551	0.0545	0.0562	0.0549
3	INCOME TAX	SERVICE COSTS	0.0290	0.0284	0.0273	0.0286	0.0290	0.0269	0.0285
4	MAINTENANCE	SERVICE COSTS	0.0654	0.0712	0.0501	0.0601	0.0573	0.0536	0.0664
5	ADMINISTRATION	SERVICE COSTS	0.0623	0.0291	0.0429	0.0432	0.0399	0.0389	0.0375
6	OTHER TAX	SERVICE COSTS	0.0031	0.0062	0.0175	0.0124	0.0020	0.0081	0.0107
7	TOTAL- Digital Switch ACF	SUM (LINES 1 THRU LINE 6)	0.2545	0.2298	0.2335	0.2392	0.2230	0.2233	0.2381
		-							
	- Land								
8	DEPRECIATION	SERVICE COSTS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0 0000
9	COST OF MONEY	SERVICE COSTS	0.1131	0.1129	0.1128	0.1131	0.1130	0.1128	0.1129
10	INCOME TAX	SERVICE COSTS	0.0598	0.0581	0.0554	0.0587	0.0602	0.0539	0.0586
11	MAINTENANCE	SERVICE COSTS	0.0091	0.0267	0.0257	0.0258	0.0284	0.0344	0.0289
12	ADMINISTRATION	SERVICE COSTS	0.0623	0.0291	0.0429	0.0432	0.0399	0.0389	0.0375
13	OTHER TAX	SERVICE COSTS	0.0277	0.0192	0.0175	0.0124	0.0471	0.0081	0.0107
14	TOTAL- Land ACF	SUM (LINES 8 THRU LINE 13)	0.2720	0.2460	0.2543	0.2532	0.2886	0.2481	0.2486
	- Building	05DUIGE 00070	0.0405	0.004.4	0.000	0.0042		0.0040	0.0005
15	DEPRECIATION	SERVICE COSTS	0.0165	0.0214	0 0220	0.0217	0.0205	0.0218	0.0235 0.0825
16	COST OF MONEY	SERVICE COSTS	0.0860	0.0834	0.0834	0.0833	0.0836	0.0834	
17	INCOME TAX	SERVICE COSTS	0.0454	0.0429	0.0410	0.0432	0.0445	0.0399	0.0428
18	MAINTENANCE	SERVICE COSTS	0.0091	0.0267	0.0257	0.0258	0.0284	0.0344	0.0289
19	ADMINISTRATION	SERVICE COSTS	0.0623	0.0291	0.0429	0.0432	0.0399	0.0389	0.0375
20	OTHER TAX	SERVICE COSTS	0.0277	0.0192	0.0175	0.0124	0.0471	0.0081	0.0107
21	TOTAL- Building ACF	SUM (LINES 15 THRU LINE 20)	0.2470	0.2227	0.2325	0.2296	0.2640	0.2265	0.2259
	OTHER FACTORS:		DC	DE	MD	ИЛ	PA	VA	wv
22	LAND INVESTMENT FACTOR	SERVICE COSTS	0.009166	0.009389	0.007799	0.010591	0.008057	0.007117	0.010255
23	BUILDING INVESTMENT FACTOR	SERVICE COSTS	0.152269	0.199439	0.146989	0.168726	0.175710	0.128173	0.218968
23	POWER INSTALL & ENGR.	SERVICE COSTS	2.7852	2.7852	2.7852	2.7852	2.7852	2.7852	2.7852
_	FACTOR FRC (377C)		1.23	1.23	1.23	1.23	1.23	1.23	1.23
25	OVERHEAD LOADING FACTOR	REGULATORY	1.23 0.03644			0.29196	0.29019	0.15549	0.03782
26	BA-SOUTH NAL WEIGHTING FACTOR			0.02566	0.16245	-			
27	METRO POWER ZONE WEIGHTING	ENGINEERING	0.5982	0.3027	0.1763	0.3097	0.2056	0.1585	0.0000
28	URBAN POWER ZONE WEIGHTING	ENGINEERING	0.3750	0.3008	0.5162	0.4901	0.4539	0.4362	0.2135
29	SUBURBAN POWER ZONE WEIGHTIN		0.0268	0.2759	0.1698	0.1724	0.2058	0.2869	0.2751
30	RURAL POWER ZONE WEIGHTING	ENGINEERING	0.0000	0.1207	0.1377	0.0278	0.1347	0.1184	0.5115
31	TOTAL WEIGHTING		1.0000	1.0001	1.0000	1.0000	1.0000	1,0000	1.0001